UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,227	03/29/2004	Robert Eugene Stoddard	CELE-01002US0	3023
	7590 04/19/2007 VEJOY, REG. NO. 22,748	EXAMINER		
102 REED RAI	NCH ROAD	LE, NHAN T		
TIBURON, CA	394920-2025		ART UNIT	PAPER NUMBER
			2618	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MOI	NTHS	04/19/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/812,227	STODDARD ET AL.				
Office Action Summary	Examiner	Art Unit				
	Nhan T. Le	2618				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>01 January 1942</u> .						
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-42 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)						
6) Claim(s) 1-15 is/are rejected.						
<ul> <li>7)⊠ Claim(s) <u>16-30</u> is/are objected to.</li> <li>8)□ Claim(s) are subject to restriction and/or</li> </ul>	r election requirement	:				
Application Papers						
	_					
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
		-) (-1) (0)				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> </ul>						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list of	of the certified copies not receiv	rea.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summar Paper No(s)/Mail I	ry (PTO-413)				
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date 10/18/04.</li> </ul>		Patent Application				

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Art Unit: 2618

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 1. <u>Claims 1-5, 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by McDonough et al (US 20040062298).</u>

As to claim 1, McDonough teaches a test system including a generator for generating an agile frequency test signal for testing a test radio where the test radio has specifications for operating in a communications system comprising, a signal component source (see fig. 3, number 317, paragraphs 0041-0046) for providing signal components including test parameters and including a test sequence and test symbols derived from radio transmissions of the communications system, a signal generator (see fig. 3, number 321, paragraphs 0041-0046) for digitally processing the test sequence, the test symbols and test parameters to form an agile test signal, a transmitter for transmitting the test signal to the test radio (see paragraphs 0041-0046).

As to claims 2, 3, McDonough teaches wherein the test system extracts the signal components from the transmission of a transmitting radio for the communications system; wherein the transmitting radio is the test radio (see paragraph 0041).

As to claim 4, McDonough teaches wherein the transmitting radio is different from the test radio and wherein the test radio has the same specifications as the test radio (see paragraph 0088).

As to claim 5, McDonough teaches wherein the component source includes a memory for storing digital values of the signal components (see fig. 7, number 730, paragraph 0088).

As to claims 10, 11, McDonough teaches where the test radio is monitored to determine performance in response to the agile test signal; where the test signal is transmitted by a transmit antenna to a receive antenna of the test radio (see fig. 7, number 705, paragraph 0088).

As to claim 12, the combination of McDonough and Taki teaches where the test signal is transmitted by a transmit wired connection to a receive wired connection of the test radio (see paragraph 0041-0046).

As to claims 13, 14, McDonough teaches where interference signals are added to the test signal; where noise is added to the test signal (see paragraphs 0088).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. <u>Claims 6-9, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonough et al (US 20040062298) in view of Taki et al (US 20040070490).</u>

Art Unit: 2618

As to claims 6, 7, McDonough fails to teach wherein the test sequence is a hopping sequence and the test radio is a frequency hopping radio; wherein signal hop frequencies and message symbols are extracted from the transmission of a transmitting radio for the communications system. Taki teaches wherein the test sequence is a hopping sequence and the test radio is a frequency hopping radio (see fig. 3, paragraphs 0076-0077, 0084-0086); wherein signal hop frequencies and message symbols are extracted from the transmission of a transmitting radio for the communications system (see fig. 3, paragraphs 0076-0077, 0084-0086). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Taki into the system of McDonough in order to obtain the original information signal.

As to claims 8, 9, the combination of McDonough and Taki teaches where the test signal is generated as an analog signal with a digital to analog converter (see Taki fig. 3, number 30, paragraphs 0076-0077, 0084-0086); where the analog signal is upconverted to a higher frequency for transmission to the test radio (see Taki fig. 3, number 30, paragraphs 0076-0077, 0084-0086).

As to claim 15, the combination of McDonough and Taki teaches where a signal amplitude of the test signal is faded (see Taki paragraph 0086).

# Allowable Subject Matter

3. Claims 16-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2618

As to claim 16, the applied reference fails to teach wherein said test radio is a frequency hop radio and said test signal is generated with a set of specified signal parameter values, a sequence of hop frequencies and message symbols that produce a known output from the test radio when the test radio is operating properly as cited in the claim.

### 4. Claims 31-42 are allowed.

Regarding to independent claim 31, McDonough et al (US 20040062298) teaches system and method for detecting direct sequence spread spectrum signals using pipelined vector processing; Taki et al (US 20040070490) teaches transponder, integrator, and communication system; Reberga (US 20040128603) teaches device for testing the conformity of an electronic connection; McDonough et al (US 20040062300) teaches system and method for detecting direct sequence spectrum signals using batch processing of independent parameters; Ko et al (US 7,062,264) teaches network testing system; Abramovitch et al (US 6,961,317) teaches identifying and synchronizing permuted channels in a parameter channel bit error rate tester. The teaching of these prior arts either combined or alone fails to teach a broadband processor for processing said input signal to determine signal components, and for each segment, determining from the input signal a hopping time of the segment, determining from the input signal a frequency of the segment, and determining signal parameters.

Dependent claims 32-42 are allowable for the same reason.

### Conclusion

Art Unit: 2618

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Reberga (US 20040128603) teaches device for testing the conformity of an electronic connection.

McDonough et al (US 20040062300) teaches system and method for detecting direct sequence spectrum signals using batch processing of independent parameters.

Ko et al (US 7,062,264) teaches network testing system.

Abramovitch et al (US 6,961,317) teaches identifying and synchronizing permuted channels in a parameter channel bit error rate tester

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Le whose telephone number is 571-272-7892. The examiner can normally be reached on 08:00-05:00 (Mon-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nhan Le

EDWARD F. URBAN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600